BTEC Assignment Brief

Qualification	Pearson BTEC International Level 3 Foundation Diploma in Applied Science Pearson BTEC International Level 3 Diploma in Applied Science Pearson BTEC International Level 3 Diploma in Biomedical Science Pearson BTEC International Level 3 Diploma in Environmental Science Pearson BTEC International Level 3 Extended Diploma in Applied Science Pearson BTEC International Level 3 Extended Diploma in Biomedical Science Pearson BTEC International Level 3 Extended Diploma in Environmental Science
Unit number and title	**Unit 4: Investigative Project Skills**
Learning aim(s)	**B:** Produce a working plan for an investigative project based on the proposal
Assignment title	**Working plan for investigative project**
Assessor	
Issue date	
Hand in deadline	

Vocational Scenario or Context	In your role of research scientist working in manufacturing, research or services you will have completed a literature search and review and have formulated your hypothesis for your project proposal. You now need to complete a working plan for their project. Remember working plan can involve individuals or a team of scientists and technicians and the project proposal has to be approved by your Supervisor. A project plan is made up of a number of items such as aims, objectives, outcomes, cost, equipment/apparatus, materials, data measured and recorded, results, variables, time schedule/deadline etc. Working plans for science investigative projects often follow the sequence of items in the 'Scientific Method'.

Task	As a research Scientist you have already produced a proposal and literature review for your chosen project. It is now time to produce a realistic working plan for this scientific project and assess its effectiveness, justifying changes after a trial run. More specifically, you will need to: • Produce a realistic and detailed working plan that would be able to be followed and carried out by your supervisor (normally this will be your assessor/tutor). This plan should: o be clear, logically ordered method designed to obtain

	results o select relevant measurements and the range of measurements to be recorded allow data to be collected accurately/reliably and to appropriate levels of precision o show how variables can be controlled/measured/monitored show how the data/information will be recorded and presented indicate how the data/information will be analysed using a statistical technique. o Indicate the use of resources, e.g. participants, equipment and instrumentation, materials. • Provide relevant health and safety information relating to hazards for the method, equipment and materials. Produce a risk assessment where hazards, risks, ethical considerations and control measures are identified. • Produce a schedule detailing the start and completion dates and milestones between the two. It is important to include any contingency plans. • Assess the effectiveness of your working plan in different ways, carrying out at least one trial run. Then after feedback from your supervisor make appropriate decisions to modify your plan. Ensure that the modifications to your methods/ procedures and schedule will give a realistic working method. Justify any changes made and give evidence why the changes are made.
Checklist of evidence required	A detailed report that includes: • A realistic working plan for the scientific project • An assessment for the effectiveness of the working project plan

Criteria covered by this task:	
Unit/Criteria reference	To achieve the criteria, you must show that you are able to:
B.D2	Assess the effectiveness of the working plan, justifying changes made after a trial run and during implementation.
B.M3	Produce a realistic working plan for the project, including a schedule, detailed method, risk assessments and contingency planning.

B.P3	Produce a working plan for the project, including a method, with health and safety considerations.
Sources of information to support you with this Assignment	All sources of information suggested are UK based. Centres are free to amend these sou these to those available in the Country of delivery where more appropriate. www.STEM.org.uk – 8 investigative projects, good practical science www.sciencebuddies.org – science projects, project guides, resources for finding and accessing scientific papers www.edu.rsc.org - all applying scientific method articles Within the copyright laws learners could search YouTube for 'The Scientific Method'
Notes to the Assessor and technician	The practical activities suggested for this assignment are required to be safety checked by the Centre before use. Pearson Education can take no responsibility for the safety of any practical activities. Before doing any practical activity, you should always carry out your own risk assessment and refer to the necessary regulations. In particular, any local rules issued by your employer must be obeyed, regardless of what is suggested here. Centres should use Health and Safety information provided by a reputable source. In the UK such an example organization is CLEAPSS http://science.cleapss.org.uk/